Miele
PROFESSIONAL

G 7881 Dental Thermal Disinfector

System Solutions for Dental Practices

The Heart of Integrated Instrument Reprocessing: The Miele G 7881 Dental Disinfector

Systematic, Streamlined, Simplified

Miele is proud to introduce the G 7881 Dental Disinfector. Featuring excellent cleaning, fast throughput, and high level disinfection, the G 7881 both streamlines and simplifies instrument reprocessing in the dental practice.

This practice of simplified instrument management will help you increase revenue, lower operating expense, and ensure the highest level of office safety.

This automated, repeatable cleaning process greatly reduces staff workload, allowing them more time chairside. The result: more patient appointments throughout the day, with a marked increase in revenue.

The G 7881 is an extremely cost-effective means of cleaning instruments. While not only eliminating the handwashing of instruments, the system features a very low per-cycle cost, with low water and detergent consumption.

The G 7881 also brings reliably safe instrument cleaning to your practice, greatly reducing your dependence on ultrasonics. The G 7881 not only exceeds OSHA standards, but provides industry-leading high level disinfection as well, with a microbial contamination reduction of 99.999999%.

Left photo: Featured is the G 7881 w/ optional Décor Panel.

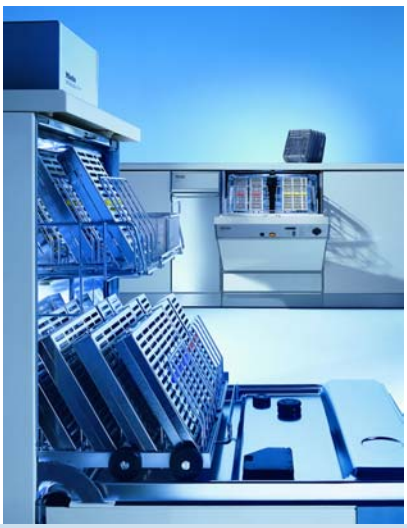
Leading Features for Optimal Results

For state of the art reprocessing, the new G 7881 includes a deionized (DI) water intake valve for connection to an external pure water source. Leading instrument manufacturers recommend a DI water rinse as the final processing step prior to sterilization.

Rinsing with DI water ensures the elimination of detergent residues and naturally occurring minerals which could lead to instrument stains and corrosion. Since the G 7881 features a dedicated DI water intake, consumption of DI water is less than 2.5 gallons per cycle, making the system both economical and efficient to operate.

For full integration of your Dental Disinfector, Miele now introduces the exclusive Décor Panel. This unique feature allows the unit to blend in seamlessly with your cabinetry, bringing the polished, professional look of the rest of your office into your instrument reprocessing center.

With an outstanding set of benefits, including high water circulation, fast throughput, and exacting temperature controls, the Miele G 7881 provides reliable, industry leading cleaning and high level disinfection to the modern dental practice.



Miele: Competence in Thermal Disinfection

For more than three decades, Miele has been a leading innovator in the development of washer-disinfectors for use in medical and dental settings. Intensive application-related research and close cooperation with hygiene specialists, instrument manufacturers, and end-users have made Miele the market leader in this field.

Generation G 78
With its new G 78 generation of Dental Thermal Disinfectors, Miele is once again blazing a trail as the leading manufacturer of washer-disinfectors.

The new G 78 series represents a major step forward in machine-based washing and disinfection technology. It offers superb performance and reliability.

Miele is a trusted partner to the dental professional, offering comprehensive advisory service as well as technical assistance, where required.

With the ability to wash, disinfect, rinse, and dry, Miele Dental Thermal Disinfectors are the clear choice of washers for today's dental professional.

Cleaning and Disinfection

The G 7881 Dental Thermal Disinfector is the result of closely studying the requirements of dental practices and specialized clinics. It has been developed specifically for the cleaning and disinfection of dental instruments and accessories, and is suitable for reducing the risk of infection as a result of injuries to dental professionals.

This system aims to optimize the flow of contaminated material in dental practices. Ideally, the dentist places contaminated instruments into a cassette. The cassettes are then processed in the G 7881 Dental Thermal Disinfector. This system heats the water to a temperature of 93°C/200°F and maintains it for 10 minutes, resulting in high level disinfection as defined by the Spaulding categories without the use of chemical disinfectants. This system's strong cleaning abilities reliably remove blood which has been dried for up to 6 hours to a virtually untraceable degree, practically eliminating the need for further manual cleaning.

When retrieving the cassettes from the disinfector, they are safe for handling. The staff will be protected against infection to a high degree while handling the instruments because of the high level disinfection that takes place during the cycle. The instruments and cassettes should then be checked, wrapped, and sterilized.

Systematic Cleaning

The G 7881 Dental Thermal Disinfector has a freshwater circulation system set up for connection to cold water. Each wash phase takes in 2.2 gal. of fresh water. The incoming water is first cleaned in the water inlet filter. The water softener ensures a consistently high water quality. The powerful circulation pump, with a turnover volume of 106 gal. per minute, circulates the water through the wide range spray arms with directionally adjusted injectors.

Three spray arms, which combine high and low pressure jets, have significant advantages for cleaning effectiveness.

The differences in the flow velocities result in a low frequency amplitude modulation. The wash solution is permanently circulated through a quadruple filter system: a coarse filter, a large area filter, a fine filter, and a microfine filter ensure that even the smallest particles are being retained and cannot get through to the circulation pump.

During the heating phase in the disinfection program, the steam condenser is activated at temperatures above 55°C/130°F. This prevents the escape of steam and vapors from the machine and eliminates the annoyance of unpleasant odors. More importantly, this also ensures that no contaminated aerosols can affect the environment.

Three automatic dispenser devices provide exact allocation of detergent, neutralizing, and rinsing agents. Containers for detergents may be conveniently stored in dispensing unit G 7896.

Right photo: Featured is the G 7881 Package # 1 with optional DOS G60/1 liquid detergent dispenser pump.

Quality, Safety and Efficiency Combined to Achieve Maximum Cleaning Results

High Tech and High Quality

Miele Quality
- High quality stainless steel
- Titanium coated heating elements
- Heavy-duty, reinforced hoses
- Complex filtration systems for water inlet and wash cabinet
- Double wall construction with insulation

High Performance in a Compact Form
- Front-loading operation
- 5 programs with Multitronic electronic controls
- Digital time/temperature display
- Diodes indicate the completion of programs, the need to add salt for the water softener, and to refill detergent, neutralizing and rinsing agents
- Freshwater circulation system for strict hygiene
- Three dispenser devices for powder detergents, neutralizing and rinsing agents
- Liquid detergents can be automatically dispensed using a connection to the optional dispenser module
- Built-in water softener
- Steam condenser operative in disinfection program
- Powerful circulation pump with 106 gal./min. throughput
- Drain pump with maximum delivery head of 3 ft.
- Waterproof system to prevent flooding in case of leakage
- Extremely quiet operation

On the Outside
The G 7881 Dental Thermal Disinfector can be used as a freestanding unit, or can be built under a continuous worktop.

On the Inside
The two level wash cabinet is made of high quality chromium-nickel steel and offers a large capacity (internal dimensions H 18 1/2" x W 20 1/2" x D 20 1/2").

The double wall construction provides heat and sound insulation and is especially designed to save energy and be particularly quiet in operation.

G 7881 Dental Thermal Disinfector: Safe and Economical

Individual Solutions
There is a range of accessories available for the Miele Thermal Disinfector. These include the DOS G60 automatic liquid detergent dispenser module, the G 7896 Storage Cabinet, and various Stainless Steel Bases for an ergonomic approach to loading and unloading.

The Disinfection Programs
The G 7881 Dental Thermal Disinfector offers programs for thermal disinfection with simultaneous cleaning and rinsing of instruments and accessories and optional drying.

The thermal disinfection takes place at 93°C/200°F with a holding time of 10 minutes, resulting in a high level disinfection as defined by the Spaulding categories.

Disinfection must be accompanied by cleanliness, because even disinfected soil offers an almost ideal environment for new microbial growth. The cleaning efficiency of the G 7881 Dental Thermal Disinfector ensures decontaminated instruments free of soil. Even blood which has been dried for up to 6 hours is reliably removed to a virtually untraceable degree.

Disinfection 93ºC – 10' Program
This program will clean and provide high level disinfected instruments. The thermal disinfection process (93ºC for 10 min.) occurs during the first cycle step to ensure that only disinfected water is dispensed into the sewage system.

Disinfection Vario Program
The Disinfection Vario program is the most widely used and recommended program. The disinfection capabilities allow the instruments to be handled safely by the staff after the cycle has finished. The thermal disinfection process (93ºC for 10 min.) occurs during the final rinse cycle. This is important because the instruments will be at their hottest at the end of the program, allowing for faster and more efficient drying results.

Wash Program
This program will clean the instruments without disinfection. The temperature of 60ºC efficiently washes dirty instruments in a short amount of time (approx. 35 min.).

Rinse Program
This program is ideal for the rinsing of instruments which may have been treated in a pre-soak solution. Separate rinsing eliminates potential problems caused by the build-up of foam.

Baskets and Inserts
Miele offers a wide range of specialized baskets and inserts. The baskets and inserts have been designed for individual instruments. Hollow instruments can be cleaned and disinfected by using injector basket O 177/1. Hinged instruments should be opened and placed in a mesh tray, i.e. the E 378 or E 379. A combination of baskets and inserts can be used to clean the specific instruments of a dental practice.

Program Contents	Disinfection Vario	Disinfection 93°C-10'	Wash	Rinse
1. Preliminary Rinse	Water circulation	–	–	Water circulation 4'
2. Cleaning	55°C	93°C-10' (Disinfection)	60°C	–
3. Interim Rinse I	Neutralizing rinse	Neutralizing rinse	–	–
4. Interim Rinse II	Water circulation	Water circulation	Water circulation	–
5. Final Rinse	93°C-10' (Disinfection)	75°C	65°C	–
6. Drying	Optional: 10'	Optional: 10'	Optional: 10'	–
Approximate cycle time (without drying)*	54'	50'	35'	4'

* Cycle time depends upon a number of variables including electrical supply, incoming water temperature, and incoming water pressure.

Extensive Biological Testing Conducted to
Prove Cleaning and Disinfection Capabilities

Thoroughly Tested By Renowned US Institutions

Tests were conducted by:
Gayle Macdonald, R.D.H., Ph.D.
University of Southern California School of Dentistry

Chris H. Miller, Ph.D.
Indiana University
School of Dentistry

John A. Molinari, Ph.D.
University of Detroit Mercy
School of Dentistry

Teresa M. Morton, Ph.D
Eastern Michigan University
Department of Biology

James L. VandenBosch, Ph.D.
Eastern Michigan University
Department of Biology

Leslie B. Heffez, D.M.D., M.S., F.R.C.D.
University of Illinois
School of Dentistry

Eliot I. Sakols, D.M.D., M.S.
Orthodontist

Kenneth W. Stoffers, D.M.D., M.S.
The University of Michigan
School of Dentistry

John M. Young, D.D.S., M.Sc.
The University of Texas at San Antonio
School of Dentistry

All test protocols will be sent upon request.

The investigators above conducted scientific tests on the G 7781 Dental Thermal Disinfector. They do not work for Miele, and hence do not endorse this product. The investigators above conducted scientific tests on the Miele G 7781, the predicate device to the new G 7881.

Special contribution by:
Nancy Andrews, R.D.H.
Consultant

Testing Thermal Disinfection
To prove the disinfection abilities of the Miele Dental Thermal Disinfector extensive biological and physical studies were conducted by renowned institutions throughout the United States and Germany. The disinfection parameters 93°C/200°F/10 min. provide high level disinfection. Although disinfection is not as absolute as and does not replace sterilization, it offers a high degree of protection against infection for dental professionals. The areas of effectiveness are removal or inactivation of vegetative bacteria, microbacteria, fungi, fungal spores, and viruses. Spores are not inactivated.

In all tests conducted by US institutions, Hu-Friedy scalers and hemostats as well as A-dec® evacuation tips were contaminated with microorganisms and blood. In some cases, hydroxyapatite was added to the contamination to simulate tooth material.

The microbial challenge was determined prior to disinfection. Each instrument was inoculated with up to 500,000,000 microorganisms, usually by submerging the instruments completely in the contaminated soil. Up to 12 instruments constituted a test load, i.e. 6,000,000,000 microorganisms in the wash chamber. To prove the effectiveness of the machine when fully loaded, the chamber was then filled up with uninoculated instruments. In most cases no microorganisms could be recultured, indicating that usually each and every microorganism was removed or killed.

The Spaulding category high-level disinfection is the same type of means as in the sterilant category except that the use pattern is different. The sterilant is used as a high-level disinfectant by e.g. reducing the exposure time within its effective range of tuberculocidal, virucidal, and bactericidal action.

The following microorganisms were used to test the Miele Dental Thermal Disinfector:
- Mycobacterium tuberculosis ATCC 25177 (H37Ra)
- Enterococcus faecium ATCC 49224
- Pseudomonas aeruginosa ATCC 15422
- Salmonella choleraesuis ATCC 10708
- Staphylococcus aureus ATCC 6538

In different models which use the same thermal disinfection parameters (93°C/200°F/10 min.) the following microorganisms were tested for:
- Streptococcus faecium ATCC 6057
- Klebsiella pneumoniae ATCC
- Stophylococcus aureus ATCC 5G511
- Escherichia coli ATCC 11229
- M. terrae ATCC 15755
- Proteus vulgaris ATCC

Extensive Biological Testing Conducted to Prove Cleaning and Disinfection Capabilities

Increasing the Microbial Challenge
To consider the worst case scenario, these tests were conducted in two series: one series in which the instruments were processed in the Miele Dental Thermal Disinfector immediately after inoculation; in the second test series the instruments were dried for 6 hours after inoculation with organisms and blood, but before processing.

To further increase the challenge, part of the instruments were scratched both with a rotating metal brush and with a grinding stone. The resulting fine and deep scratches on the surface of the instruments are hard to clean and disinfect, and may provide a safe harbor for microorganisms. Nonetheless, scratched instruments are commonly used in practice.

Mycobacterium Tuberculosis
Infections with tuberculosis have been spreading again in the United States during the last few years. For this reason, special emphasis was laid upon the disinfection abilities regarding this organism.

Hinged, hollow, and hand instruments were inoculated with the Mycobacterium tuberculosis, strain ATCC 25177, and blood. The estimated microbial load was 10^8 organisms per instrument. Three hinged, 3 hollow, and 6 hand instruments constituted one test load. Both test series with and without drying were conducted.

The results showed that no live organisms were present after the disinfection cycle, indicating a log-reduction factor of at least 8. Tuberculocidal action was proved.

Pseudomonas Aeruginosa
Salmonella Choleraesuis
Staphylococcus Aureus
Tests on these bacteria are required for disinfectants. These bacteria were tested for in the Miele Dental Thermal Disinfector even with the elevated challenge of 6 hours drying and scratched instruments. The inoculum also contained blood and hydroxyapatite to simulate tooth material.

In most cases no organisms could be recultured, indicating that usually each and every organism was killed.

Enterococcus Faecium
The bacterium E. faecium, ATCC 49224, was tested in a similar fashion as the Mycobacterium tuberculosis.

In no cases could any organisms be recultured. A log-reduction factor of at least 8 was proved.

Hepatitis B Virus
The HBV cannot be artificially cultured. Hence, the direct testing of the HBV is not feasible. However, the Enterococcus faecium possesses similar heat resistance properties as the HBV*. E.g. the German Federal Health Authority accepts the testing of E. faecium as a replacement for HBV**.

The Miele Dental Thermal Disinfector achieves a log-reduction factor of at least 8 for E. faecium.

HIV
The Human Immunodeficiency Virus (HIV) causing the Acquired Immunodeficiency Syndrome (AIDS) is very unstable in the presence of heat. An American study shows that HIV is reduced to 1/10 at 60°C/140°F after 24 seconds***. After 10 minutes at this temperature a log-reduction factor of 25 is achieved. That means that from 10^{25} HI viruses it is likely for 1 virus to survive.

The Miele Dental Thermal Disinfector reaches a temperature of 93°C/200°F and holds it for 10 minutes. Therefore it is safe to assume that HIV will be reduced according to a high-level disinfection standard. For this reason the HIV was not specifically tested for with this system.

Proven Cleaning Abilities
A wide range of cleaning studies have been conducted utilizing common dental instruments.

One study was conducted with fresh human blood. This blood was not defibrinated so that it would clot after a short time. This certainly represents the most realistic testing possible. Two test series were conducted both with immediate cleaning and with cleaning after a drying time of 6 hours. Both new and scratched instruments were utilized.

After completion of the cleaning and disinfection cycle the instruments were tested for traces of blood residues with Hemastix. In most cases no blood residues could be found. In very few cases residues could be traced in hinges of hemostats. However, these residues were close to the detection limit of the test.

Other cleaning tests that were conducted affirmed the claims of this brochure: Orthodontic and surgical instruments taken from actual patient use, dental instruments inoculated with sheep blood and hydroxyapatite, and instruments contaminated with dental cement.

Disinfection Parameters
93°C/200°F/10 min.
The thermal disinfection process relies upon the two physical parameters temperature (93°C/200°F, accuracy: +4°C/7.2°F -2°C/3.6°F) and time (10 min.). The Miele Dental Thermal Disinfector strictly adhered to these parameters throughout the wash cabinet, even fully loaded. No cold spots could be detected.

*G. Spicher: Zur Desinfektion bei Virushepatitis, in: German Federal Health, Authority leaflet "Bundesgesundheitsblatt", Vol. 22, 1979, No. 617, pp. 114–116.

** G. Spicher, J. Peters: Richtlinie des Bundesgesundheitsamtes zur Prüfung von thermischen Desinfektionsverfahren, in: Ibid, Vol. 23, 1980, No. 23, pp. 364–367.

*** J. S. McDougal, L. S. Martin, S. P. Cort, M. Mozen, C. M. Heldebrant, B. L. Evatt: Thermal Inactivation of the Acquired Immunodeficiency Syndrome Virus, Human T Lymphotropic Virus-III/Lymphadenopathy-associated Virus, with Special Reference to Antihemophilic Factor, in: The Journal of Clinical Investigation, Inc., Vol. 76, August 1985, pp. 875–877

Systematic Protection from Infection

Cleaning: The Most Important Step
Without proper cleaning, sterilization is not possible. A clean and debris-free surface is required during steam sterilization, allowing steam to contact all instrument surfaces. Tests have demonstrated that bacteria can survive a steam sterilization cycle if they are protected under dried debris. The Miele Thermal Disinfector provides superior cleaning, virtually eliminating the need to manually scrub an instrument.

Disinfection is Not Sterilization
Disinfection is generally a less lethal process than sterilization. It eliminates virtually all recognized pathogenic microorganisms but not necessarily all microbial forms (e.g. bacterial endospores) on inanimate objects. Disinfection does not ensure an overkill, and therefore disinfection processes lack the margin of safety achieved by sterilization procedures. Hence, disinfection processes cannot replace sterilization.

Disinfection efficiency is measured by the log-reduction factor. A log-reduction factor of 1 indicates that from 10 organisms, it is likely for one organism to survive on instrument surfaces. The microbial population is reduced by 90%.

A log-reduction factor of 8 means that from 100,000,000 microorganisms, it is likely for one organism to survive, i. e. the microbial contamination is reduced by 99.999999%. The Miele G 7881 Dental Thermal Disinfector achieves a log-reduction factor of 8.

Caring for Our Environment
Although environmental concerns should not decrease infection control standards, it is always preferable to choose equipment that provides an environmentally friendly method. Chemical agents used in thermal disinfection usually put a lesser burden on our environment than chemical disinfectants.

In the interest of maintaining the highest possible standard of efficiency and safety, the following steps are widely accepted by the dental profession:

Top photo: Featured is the G 7881 with optional Stainless Steel Décor Panel.

The Miele Thermal Disinfector is an Integral Part of Instrument Reprocessing

6 Steps for Hygienic Processing of Instruments

1. Containment and Transportation
Immediately after use, contaminated instruments are transported safely* in cassettes or on trays to the sterilization area. Waste is segregated and disposed of in appropriate waste receptacles.

2. Cleaning and Disinfection
Instruments and cassettes should be placed directly into the machine after use at chairside. The contaminated instruments can be kept in the machine for interim dry storage for up to 6 hours. An automated washing program should then be selected. This system also offers an optional drying cycle, which is recommended.

3. Inspection and Sorting
After cleaning, disinfection, and drying, the instruments can be safely checked for normal wear and damage.

4. Preparation for Sterilization
Instruments and cassettes are placed in sterilization pouches or wrap, and sealed according to manufacturers directions to ensure sterilization until use.

5. Sterilization
Packaged instruments are processed through the complete cycle of a steam autoclave, chemical vapor sterilizer, or dry heat sterilizer, according to manufacturers' directions for each type of sterilizer.

6. Storage of Sterile Instruments
It is essential to preserve sterility until use. Packaged sterilized instruments may be stored on clean shelves or in clean drawers.

*Appropriate PPE including gloves, masks, eyewear, and protective outer lab coat or grown, must be worn while handling all unsterilized instruments according to the current OSHA Bloodborne Pathogens Standard.

Systematic Instrument Care

Instruments Suitable for Thermal Disinfection

Only instruments that are thermally stable up to 97°C/206.6°F and corrosion resistant should be processed in the disinfector. The majority of dental instruments consist of high quality stainless steel. The stainless steel quality varies depending on the specific instrument criteria.

Generally, only high-quality stainless steel instruments are recommended for cleaning in the Miele Thermal Disinfector.

Miele recommends that instruments made from aluminum, chrome, nickel, carbon, or carbide steel, or instruments that are chrome plated should not be processed in the machine.

If there are questions regarding the suitability of any instrument for use in the G 7881, contact your Miele representative.

Water Quality

Water quality can sometimes have an effect on the instruments that are washed in the Miele Thermal Disinfector.

Some areas of the United States have better water quality than other areas. For areas where water quality is questionable, Miele recommends the use of an external water purification unit connected to the DI intake valve on the back of the unit.

The external purification unit is then able to supply either DI or reverse osmosis (RO) water during the final rinse of the program, virtually eliminating any minerals or compounds that may be damaging to the instruments. And through Miele's integrated DI intake valve, this pure water is only used when it is needed, in the final rinse cycle, greatly reducing the costs associated with a pure water system.

G 7881 Dental Disinfector At A Glance

G 7881

- 93° C (~200° F) for 10 minutes for high level disinfection
- Selectable programs for rinsing, cleaning and high level disinfection
- 106 gallon/minute water circulation for excellent cleaning
- White finish exterior
- Exclusive Miele Décor Panel for integration into cabinetry
- Integrated extra water inlet for DI water, used in areas where water quality is poor
- Integrated heat exchanger, preventing the release of heat, humidity and odors in the room
- Can be used in small reprocessing areas
- Integrated water softener
- Audible alarm
- Equipped with dispensing systems for detergent, neutralizing agent and rinse aid
- Optional liquid dispensing system
- Dimensions:
  33.46”H with lid x 23.54”W x 24”D
  (32.28”H without removable lid)
- Electric:
  208 V 60 Hz, 2 x 30 Amp (convertible to 3 phase, 3 x 20 Amp)

Miele

The Miele Exclusive Décor Panel

The Modern Dental Practice

As a business owner, you understand the impact a clean, modern dental practice has on your patients. You and your staff take pride in it. You want to showcase the latest in dental technology, yet keep the office functional and streamlined. The practice becomes a reflection of both your professionalism and your talent.

Whether planning a new practice or enjoying an existing design, the new G 7881 has your specific practice in mind.

Left photo: Featured is the G 7881 w/ optional Décor Panel.

Custom Integration

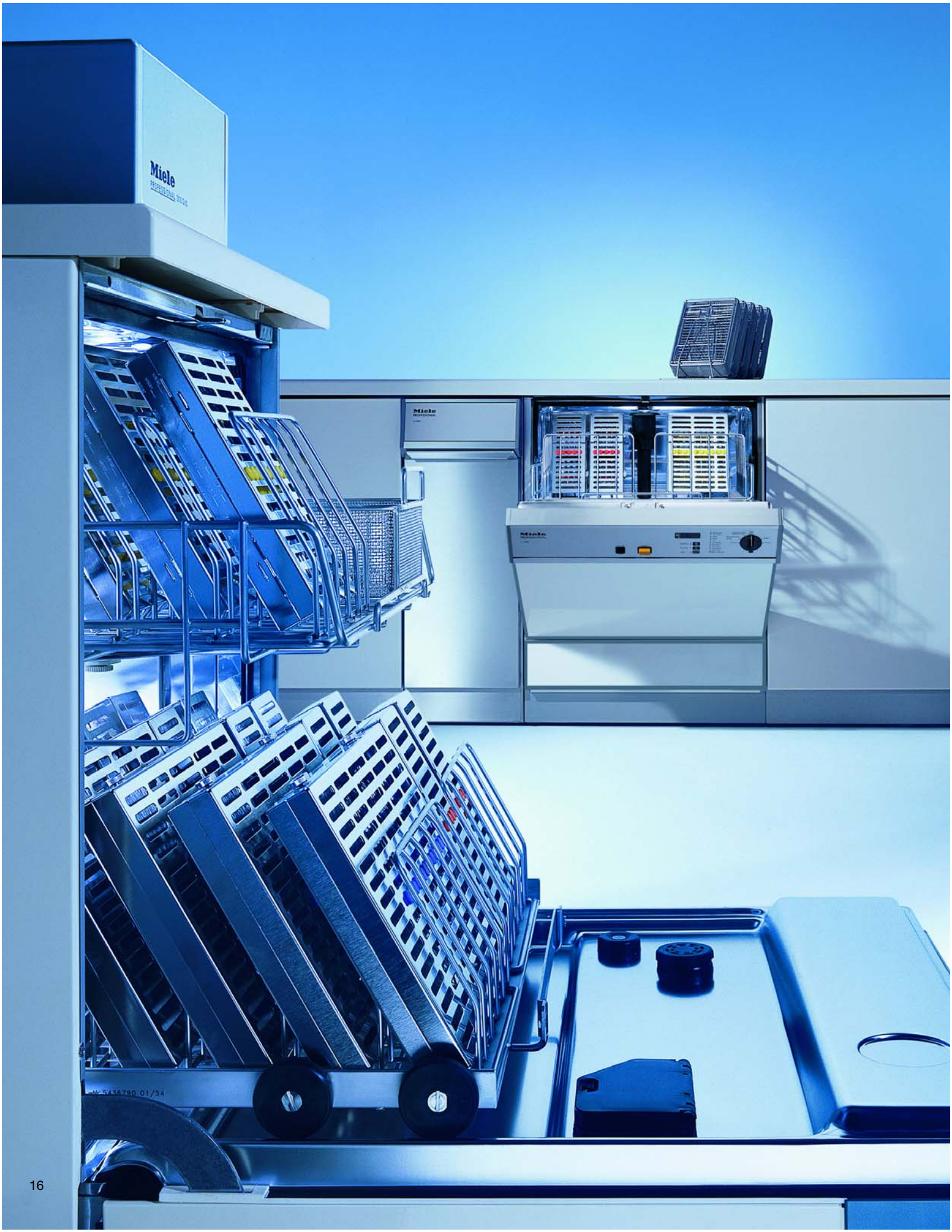
To seamlessly integrate your instrument reprocessing center with the rest of your practice, Miele introduces the exclusive Miele Décor Panel.

This unique feature allows the new Miele dental disinfector to blend seamlessly with your cabinetry, bringing the polished, professional look of the rest of your office into your instrument reprocessing center.

Ease of Installation

The exclusive Miele Décor Panel feature allows you to match your dental disinfector to your cabinetry by simply replacing the two white front panels on your machine.

Available through Miele or your local custom cabinet manufacturer, Miele stocks the most common laminates for matching the A-dec Preference ICC. For custom applications, these panels are available in a full palette of colors and designs or in stainless steel, providing you with an exact match for your office and instrument reprocessing center.


Miele
Miele
Miele

G 7881 Package #1: General Dentistry

This equipment package is recommended for the general dentist who utilizes cassette systems.

This package of baskets and inserts will hold 18+ cassettes in the E 523 inserts (depending on the size), as well as hinged and other instruments placed in open mesh tray E 379.

Left photo: Featured is the G 7881 Package # 1 with optional DOS G60/1 liquid detergent dispenser pump in foreground and G 7896 AW storage unit in background.

G 7881 Package #2: Oral Surgery

This equipment package is recommended for oral surgeons who have a need to process reusable hollow instruments (i.e. suction tips) and also use cassettes.

The specially designed O 177/1 upper basket has 26 jets that will shoot water and detergent up through the inside of the hollow instrument, eliminating the need for manual scrubbing with a brush.

This package of baskets and inserts will hold 12+ cassettes in the E 523 inserts (depending on the size), as well as hinged and other instruments placed in open mesh tray E 379 and hollow instruments in the O 177/1 injector basket.

Left photo: Featured is the G 7881 Package # 2 with optional Stainless Steel Décor Panel.

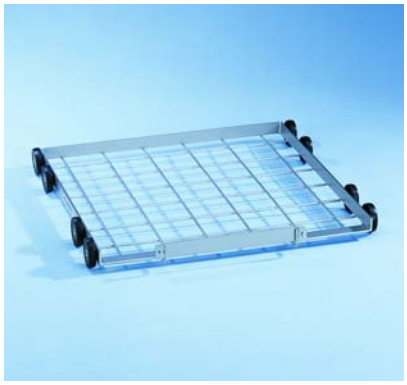
Upper and Lower Baskets

O 190

- The standard upper basket for general dentistry
- Holds inserts to support cassettes
- Holds inserts for loose instruments
- Built-in spray arm and water coupling system for optimal spray volume
- Rolls out for easy loading and unloading
- Article No. 69119001

O 177/1

- The standard upper basket for oral surgery offices cleaning hollow instruments
- 26 jets plus 12 funnels for direct injection of hollow instruments with inner diameter of 1/8” or larger
- For cleaning instruments with smaller inner diameters, replace jets with injection funnels DRM19 (19mm width) or DRM 29 (29mm width)
- Right top of basket holds inserts for cassettes or loose instruments
- Built-in spray arm and water coupling system for optimal spray volume
- Rolls out for easy loading and unloading
- Article No. 69117702



U 874

- Holds inserts to support cassettes
- Holds inserts for loose instruments
- Rolls out for easy loading and unloading
- Article No. 69187403

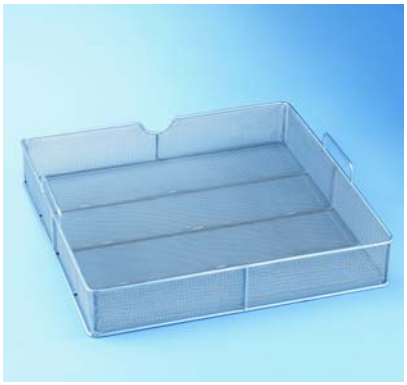
Individual Inserts

Insert E 523

- Holds various cassettes from small hygiene to large oral surgery
- Holds 6 or more cassettes
- Fits in O 190 and O 177/1 upper baskets and U 874 lower basket
- Recommended holder for Hu-Friedy cassettes
- Cassettes not included
- Article No. 69552301

Half Universal Mesh Tray E 379 (1/2)

- Holds various hand instruments
- Constructed of 1/16" wire mesh
- Fits in O 190 and O 177/1 upper baskets
- Insert dimensions:
  $3^{15}/_{16}$" H x $7^{1}/_{16}$" W x $18^{3}/_{32}$" D
- Article No. 69537901



Full Universal Mesh Tray E 378 (1/1)

- Holds various hand instruments
- Constructed of 1/16" wire mesh
- Fits in U 874 lower basket
- Insert dimensions:
  $3^{15}/_{16}$" H x $18^{3}/_{32}$" W x $18^{3}/_{32}$" D
- Article No. 69537801

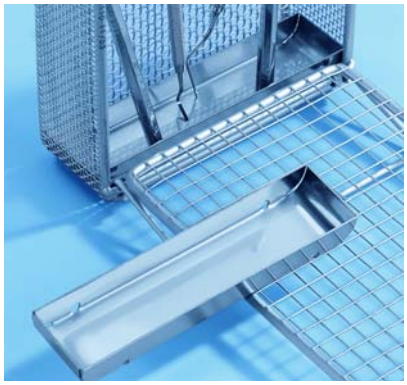
Specialty Inserts

Mesh Tray E 146 (1/6)

- Mesh basket with lid for hand instruments
- Constructed of 1/16" and 1/8" wire mesh openings
- Ideal for larger hinged instruments requiring maximum water flow
- Fits in E 131 insert
- Insert dimensions: $2^{5}/_{32}$" H x $5^{7}/_{8}$" W x $8^{27}/_{32}$" D
- Article No. 69514601

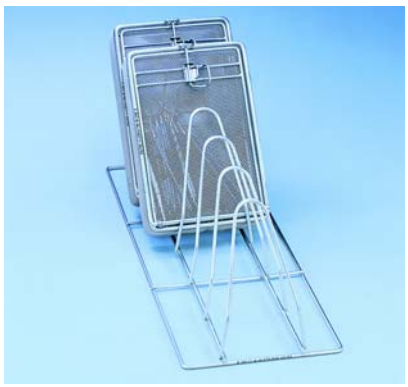
Mesh Tray E 363 (1/6)

- Mesh basket with lid for hand instruments
- Constructed of 1/32" wire mesh openings
- Small mesh openings make it ideal for cleaning thinner pointed instruments
- Fits in E 131 insert
- Insert dimensions: $2^{5}/_{32}$" H x$5^{7}/_{8}$" W x $8^{27}/_{32}$" D
- Article No. 69536301



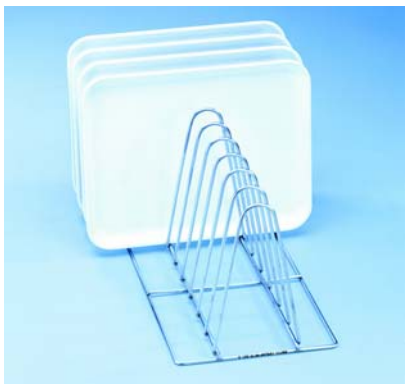
E 328 Support Insert

- Upright support of single and double-ended instruments
- Fits in E 146 and E 363 mesh baskets (baskets not included)
- Article No. 69732801



Insert E 131/1

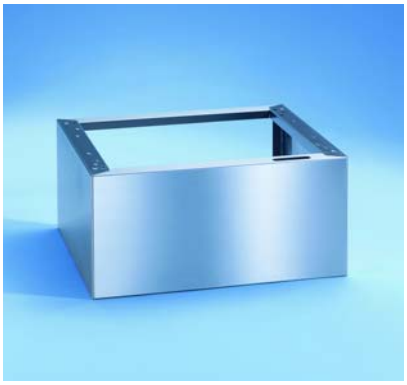
- Holds up to 5 cassettes or mesh baskets
- Two will fit in a single U 874 lower basket
- Cassettes not included
- Article No. 69513102



Insert E 130 (1/2)

- For cleaning up to 10 trays (max. tray size: $6^{3}/_{4}$" W x $1^{1}/_{4}$" thick)
- Two can fit in a single U 874 lower basket
- Trays not included
- Insert dimensions: 7" H x 7" W x $17^{1}/_{2}$" D
- Article No. 69513001

Specialty Accessories



Stainless Steel Base - UE 30-60/60-78

- 12” height for ergonomic loading and unloading
- Recommended for freestanding applications
- Base dimensions: 12” H x 24” W x 24” D
- Article No. 69376009

DOS G60/1 Module

- Automatically and reliably adds liquid detergent during each cycle
- Eliminates need for manual fill of the powder detergent door cup
- Required for liquid detergents and Detergent Package #2
- Article No. 69747007

G 7896 Storage Cabinet

- Holds up to 4 DOS G 60/1 modules and 4 chemical storage containers
- A single unit can serve two G 7881s

G 7896 AE (shown top)

- Stainless steel front, sides and top
- Article No. 69789602

G 7896 AW

- White enamel front and sides, grey laminate top
- Article No. 69789601

Stainless Steel Décor Panel

- True 304-grade stainless steel
- Article No. PROF304F

Limber Maple Décor Panel

- Wilsonart 10734-60
- Article No. PROF10734W

Oyster Gray Décor Panel

- Formica 929-5
- Article No. PROF929F

Concrete Stone Décor Panel

- Formica 7267-58
- Article No. PROF7267F

Sand Stone Décor Panel

- Formica 7265-58
- Article No. PROF7265F

Custom Laminate Décor Panel

- Please allow 6-8 weeks for delivery
- Please call Miele for Article No.

Mounting Kit Floor Brackets

- Prevent machine from falling forward in freestanding applications
- One kit needed per machine
- Article No. 00253531

Cool Down Kit

- May be required for locations with PVC drain plumbing
- Article No. COOL-DOWN KIT

Miele

Detergents

neodisher™ MA
Powder Detergent (10 kg)
- Yields approx 300 cycles
- Powder alkaline detergent
- Powder alternative to neodisher™ FA
- Article No. US486876

neodisher™ FA
Liquid Detergent (5 L)
- Yields approx 100 cycles
- Liquid alkaline detergent
- Liquid alternative to neodisher™ MA
- Requires DOS G60/1 dispensing system
- Article No. US489533

DOS G60/1 Module
- Automatically and reliably adds liquid detergent during each cycle
- Eliminates need for manual fill of the powder detergent door cup
- Required for liquid detergents and Detergent Package #2
- Article No. 69747007

neodisher™ N
Acid Neutralizer (5 L)
- Yields approx 500 cycles
- Liquid neutralizing agent released immediately following the alkaline main wash cycle
- Restores pH balance in wash chamber
- For use with neodisher™ FA or MA
- Article No. US482433

neodisher™ Mielclear
Rinse Aid (1 L)
- Yields approx 300 cycles
- Protects dental instruments and allows better drying results
- Article No. US496646

Water Softener Reactivator
- For recharging the on-board water softener
- Extremely pure reactivator free of any dyes and additives

neodisher™ Medizym
Near-Neutral pH Liquid Detergent (5 L)
- Yields approx 100 cycles
- Liquid near-neutral pH detergent
- Requires DOS G60/1 dispensing system
- Article No. US404033

neodisher™ Z
Acid Neutralizer (5 L)
- Yields approx 500 cycles
- Liquid neutralizing agent released immediately following the main wash cycle
- For use with neodisher™ Medizym
- Article No. US483033

Left photo: Featured is the G 7881 Package # 1 with optional DOS G60/1 liquid detergent dispenser pump.

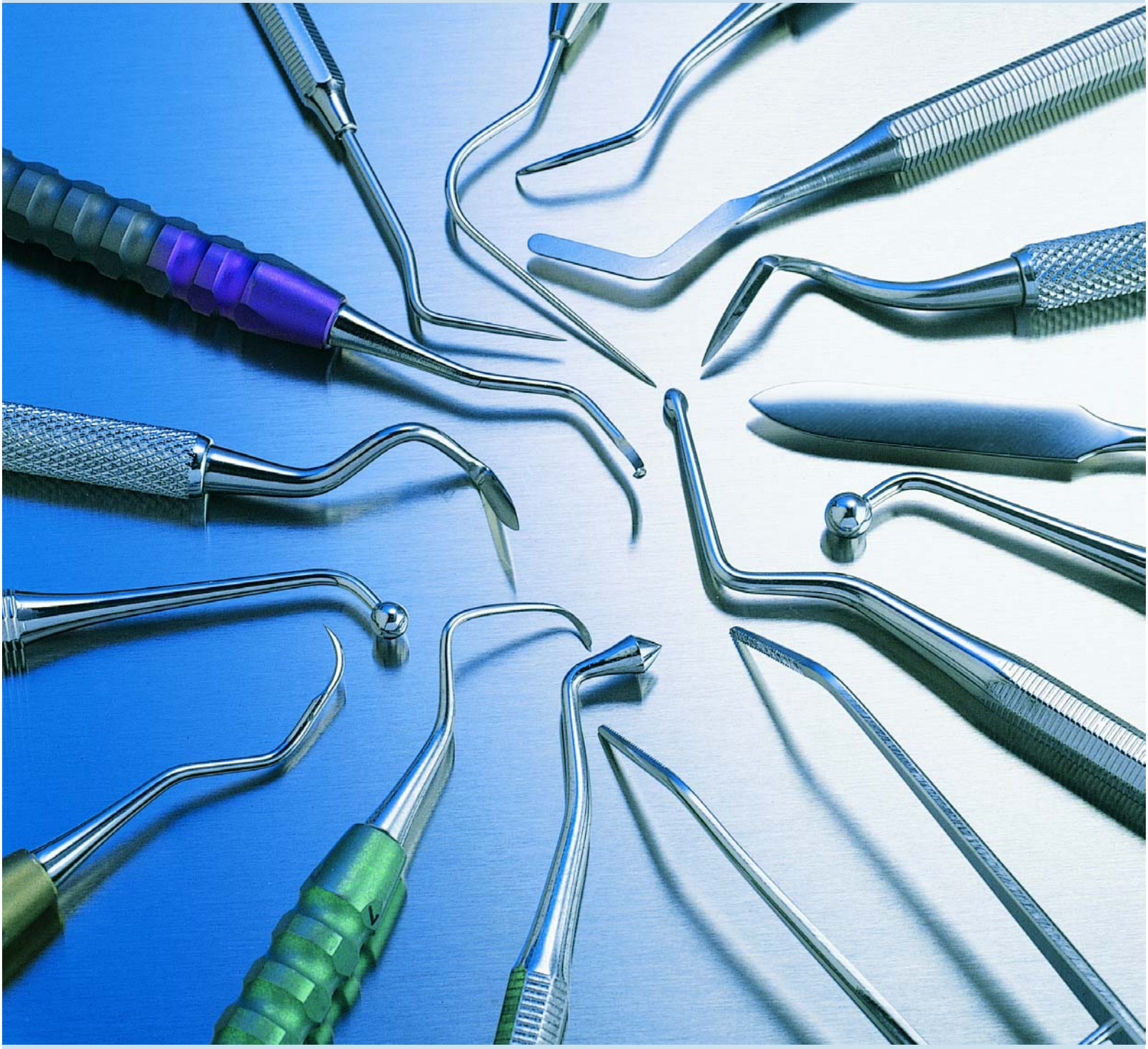
Technical Data

Control Unit	
Control system supplied with five standard programs:	
	Disinfection Vario 93°C/200°F
	Disinfection 93°C/200°F
	Wash
	Rinse
	Drain
Cleaning Mechanism	
Rotary:	Three multi-jet spray arms
Direct Injection:	Using optional O 177/1 Upper Basket
Drying	
Flash heat drying using standard sump heating element	
Water Softener	
Built-in, with adjustable water hardness	
Automatic reactivation	
Detergent Dispensing	
Machine is equipped with a standard powder door cup	
An optional automatic dispensing module is available for dispensing of liquid detergents	
Main Circulation Pump	
Circulation:	106 gal/min (400 l/min)
Construction:	ABS plastic impeller and housing
Cabinet and Chamber	
Materials and Construction:	
Exterior:	White front panels standard, with optional stainless steel panel or custom panels available
Interior:	Type 304 SS sides, back, and top
	Type 316 SS bottom and door
Plumbing Connections	
One or two water connections as follows:	
Tap	a. Cold water for wash cycles. 5'5" connection hose with 3/4" hose thread unions
	Minimum flow rate of 2.5 gpm/10-147 psi (recommended 25-60 psi)
DI Source (use optional)	b. 5'6" connection hose with 3/4" hose thread unions
	Minimum flow rate of 2.5 gpm/10-147 psi (recommended 25-60 psi)
Drain Connections	
Connection	One 7/8" ID flexible drain hose, 4'7" long
	Maximum drain height, 39.4"
	Maximum drain length, 13'
Electrical Requirements	
Single Phase 208 V, 60 Hz, 2 x 30 Amps	
Three Phase 208 V, 60 Hz, 3 x 20 Amps (Available as an optional conversion)	
	Unit is equipped with a 5'11", 10 AWG, 3 wire, unterminated power cord
	Units are CSA approved (certificate 1319665)
Dimensions	
Interior:	18.5"H x 20.5"W x 20.5"D
Exterior:	33.46"H x 23.54"W x 24.0"D (Height is 32.28" without lid)
Noise Level	
< 60 dBa	
Customizable Décor Panels	
Main Panel:	442 mm H x 586 mm W, 1.2 mm thick
Toe Kick Service Panel:	117 mm H x 586 mm W, 1.2 mm thick

Stainless Steel and select Laminate Décor Panels available through Miele. Custom panels available with a 6-8 week delivery time.

Miele
PROFESSIONAL

Miele Professional
9 Independence Way
Princeton, NJ 08540
800-991-9380
609-419-4241
dentaldisinfector.com



©2006 Miele, Inc.

B999623 04/06

Miele
PROFESSIONAL

G 7881 Dental Thermal Disinfector

Installation and In-service Manual

1. Examine exterior packaging for damage

- If damaged, notify carrier and then please call 800-666-0486 for Miele's Returns department.

2. Uncrating instructions

- Carefully cut the two packing straps.
- Lift cardboard box off of machine.
- Properly dispose of all packaging materials. All of the protective packaging material is environmentally safe and can be recycled.
- Carefully lift machine from pallet. Do not lift machine by its lid!

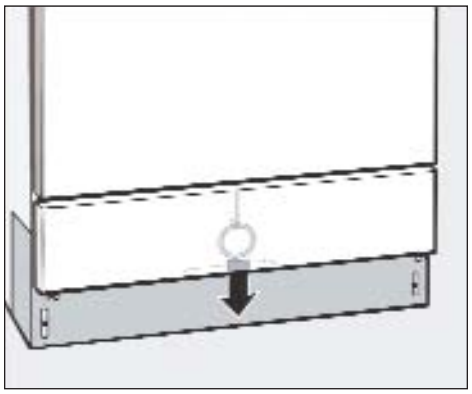
3. Remove Operating Instructions manual from the rear of the machine. Save for reference.

Note: You will need the manual and installation diagram for the remaining steps.

4. Open machine door via the emergency release and remove accessory items

(i.e. water inlet filter, drain hose, warranty card, water softener funnel, red empty 5L neutralizer container, steam deflector, etc.)

- Slowly pull the emergency release cable located at the bottom of the machine (see illustration).



5. Remove styrofoam blocks from upper basket support and discard

6. Connect drain hose to the rear of the machine using enclosed hose clamp

All plumbing work must be performed by licensed professionals and adhere to all applicable Local, State, and Federal Codes. Note: plumbing code in certain areas may require the use of the optional Cool Down Kit (Item # Cool Down Kit) to reduce the temperature of the effluent. Contact Miele Technical Service for ordering and installation information.

- The drainage system is fitted with a non-return valve which prevents dirty water from flowing back into the machine via the drain hose.
  - The drainage system must be able to take a minimum drainage flow of 4 gal/min.
  - The onsite drain connection point should be located between 1 ft. (0.3 m) and 3 ft. (1 m) above the lower edge of the machine.
    - If it is lower that 1 ft. (0.3 m), lay the hose in a curve at a height of at least 1 ft. (0.3 m).
- The drain hose is approx. 5 ft. (1.4 m) long, is flexible and has an internal diameter of 7/8 in. (22 mm). It must not be shortened. Hose clamps are supplied for securing it in position.
- The drainage system must not exceed 12 ft. (4 meters).

The machine should preferably be connected to a separate drainage system such as a standpipe or floor drain. However, if local code permits the drain hose can be connected to an under-sink ¾" tailpiece.

7. Either attach proper plug to power cord or hardwire to electrical supply

All electrical work must be performed by licensed professionals and adhere to all applicable Local, State, and Federal Codes.

The machine comes equipped for a connection to 208 V, 60 Hz, 1 phase power supply. It is equipped with a 6ft. long, 10/3 AWG power cord, without a plug. The installer may either install an electrical plug or hardwire the machine into an electrical junction box that has been installed on the wall or in a cabinet adjacent to the machine. It should be connected to the main power supply.

Voltage:	208 V, 1 phase Possible conversion to three-phase - Contact Miele Technical Support for additional information. The conversion diagram and the wiring diagram is secured to the inner side of the service panel.
Frequency:	60 Hz
Rated Load:	60 kW
Circuit Breaker:	2 x 30 A
Black:	Connect to L1 (hot)
White:	Connect to L2 (hot)
Green:	Connect to GND (ground)

WARNING – THIS APPLIANCE MUST BE GROUNDED

The machine must only be operated with the voltage, frequency, and fusing shown on the data plate located on the rear of the machine and on the plinth (behind the service panel).

8. If applicable, connect the optional DOS G 60/1 power supply and feed hose (Please refer to DOS G 60/1 Installation Instructions that are shipped with the unit)

9. Installation & activation/deactivation of the water intake connections

All plumbing work must be performed by licensed professionals and adhere to all applicable Local, State, and Federal Codes.

The Miele G 7881 Dental Disinfector is equipped with both a DI Water intake (marked “H2O PUR”) hose and a Cold Tap Water intake (marked with a blue sticker) hose. Leading instrument manufacturers recommend a DI water rinse as the final processing step prior to sterilization. Rinsing with DI water ensures the elimination of detergent residues and naturally occurring minerals which could lead to instrument stains and corrosion. However, if water quality is not an issue, the machine can be installed using the Cold Tap Water intake only (see below).

Acceptable water pressure (flow rate) for both intake valves: 10-147 psi each
Recommended water pressure (flow rate) for both intake valves: 25-60 psi each

- DI Water Intake: ¾"(19 mm) GHT female hose thread, connected to external DI water supply source
- Cold Tap Water Intake: ¾"(19 mm) GHT female hose thread, connected to cold tap water source
- Use the proper inline cartridge filter: Matte finish for the DI intake, chrome finish for the Cold Tap intake

1. Turn off the machine with the "On/Off" button.
2. Turn the program selector to the "Stop" position.
3. Press and hold the "Display” and "Start” buttons at the same time.
4. Simultaneously turn the machine on with the "On/Off" button.
   The current program status "P…" will appear in the display and the "Fill/Drain” indicator will illuminate.
5. Press the "Drying” button once. "E01" (programming level 1) will appear in the display.
6. Turn the program selector one switch position counter-clockwise (11 o’clock position).

If machine is installed with both the DI Water & Cold Tap Water intakes:

7. Press the "Display” button as many times as necessary until the display shows the number “110.”
   Once the number "110" has been reached the G 7881 will activate the DI Intake Valve for the final rinse.
8. Press the "Start” button. "SP" will appear in the display.
9. Press the "Start” button again.

OR:

If machine is installed with only the Cold Tap Water intake:

7. Press the "Display" button as many times as necessary until the display shows the number “111.”
   Once the number "111" has been reached the G 7881 will deactivate the DI Intake Valve.
8. Press the "Start” button. "SP" will appear in the display.
9. Press the "Start" button again.

The inlet hose must not be shortened or damaged in any way.

10. Adjust the feet to the proper height/Install machine on solid non-carpeted surface

- Undercounter

  Note: Removal of lid not necessary for all undercounter installations.
  - Open the door, remove fixing screws on the left and right sides using a Phillips head screwdriver.
  - Pull the machine lid approx. 5mm forwards, lift it upwards, and remove.
  - Adjust feet to proper height.
  - Slide machine into place, making sure machine is level in all directions.
  - Secure machine to the front edge of the worktop using screws to the left and right of the front trim. Do not use silicone sealant in gaps between the machine & neighboring units.
  - Secure machine to countertop, making certain to not pinch hoses.
- Freestanding
  - Use Mounting Kit (Item #00253531)

11. Install the Steam Deflector if applicable

Note: A Steam Deflector protects the countertop and comes packaged with the unit.

12. Test the water hardness and activate softener if necessary

Note: If not using water softener, please set and save the water softener setting at 0.

Before using the machine for the first time the water softener should be programmed according to the hardness of the incoming water. You can determine water hardness with a simple test kit or by contacting your local water authority.

Note: the G 7881 is set at the factory for a water hardness level of 19 gr/gal (340 ppm). If your hardness level is other than the factory default then the G 7881 must be reprogrammed to the proper setting. Reference the Water Hardness Table below for the correct value.

Water Hardness Table

Settings 0-20	gr/gal 1-20	ppm $CaCo_3$
0	1	20
0	2	40
0	3	50
4	4	70
5	5	90
6	6	110
7	7	130
8	8	140
9	9	160
10	10	180
11	11	200
12	12	220
13	13	230
14	14	250
15	15	270
16	16	290
17	17	310
18	18	320
19	19	340
20	20	360

Settings 21-40	gr/gal 21-40	ppm $CaCo_3$
21	21	380
22	22	400
23	23	410
24	24	430
25	25	450
26	26	470
27	27	490
28	28	500
29	29	520
30	30	540
31	31	560
32	32	580
33	33	590
34	34	610
35	35	630
36	36	650
37	37	670
38	38	680
39	39	700
40	40	720

ne neodishe	gr/gal 41-60	ppm $CaCo_3$
41	41	740
42	42	760
43	43	770
44	44	790
45	45	810
46	46	830
47	47	850
48	48	860
49	49	880
50	50	900
51	51	920
52	52	940
53	53	950
54	54	970
55	55	990
56	56	1010
57	57	1030
58	58	1040
59	59	1060
60	60	1080

A. Filling the salt reservoir:

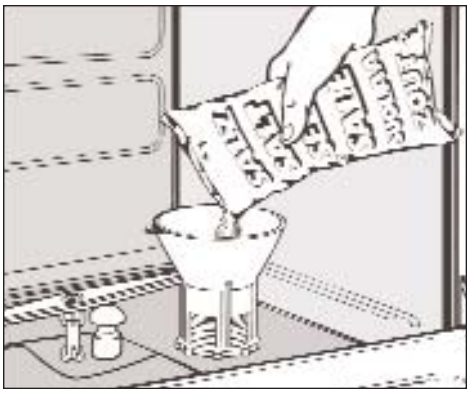
Only Miele approved reactivation salt should be used in the G 7881.

Do not use other types of salt, e.g. table salt, agricultural, or gritting salt. These could contain components which are insoluble in water and could damage the water softener. If in doubt, consult Miele's Professional Department.

The salt reservoir holds approx. 2.5 kg of salt.

Inadvertently filling the sale reservoir with cleaning agent will damage the water softener. Before filling, make sure that you are using reactivation salt.

12. Test the water hardness and activate softener if necessary (continued)



A. Filling the salt reservoir

- Remove the bottom basket from the machine.
- Unscrew the salt reservoir cap.

Before filling the salt reservoir with reactivation salt for the first time, fill it with approx. ¾ gallon of water.

- Place the funnel provided in place (see illustration).
- Carefully fill the reservoir with salt. Displaced water will run out as it is being filled.
- Wipe any residual salt off the screw threads on the socket.
- Screw the cap on firmly.
- Immediately after this step: Run the "Rinse" program to remove any traces of salt from the cabinet.

Note: There may be a delay before the "Rinse" program starts due to the reactivation of the water softener.

B. Setting the water softener

- Turn off the machine with the "On/Off" button.
- Turn the program selector to the "Stop" ▽ position.
- Press and hold the "Display" min °C and "Start" ◇ buttons at the same time. Simultaneously turn the machine on with the "On/Off" button. The current program status "P…" will appear in the display and the "Fill/Drain: indicator will illuminate.
- Press the "Drying" button once. "E01" (programming level 1) will appear in the display.
- Turn the program selector one switch position clockwise (1 o'clock position). The number "19" will appear in the display (this indicates the factory water hardness setting in gr/gal, equivalent to 340 ppm).
- Press the "Display" min °C button as many times as necessary or hold it in until the required value (hardness level in gr/gal) appears in the display. Once the number "60" has been reached the counter will begin again at "0.
- Press the "Start" ◇ button. "SP" will appear in the display.
- Press the "Start" ◇ button again.

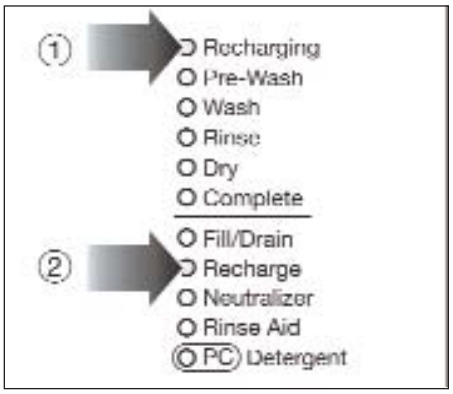
The setting will now be stored in memory. The display will go out. For future serving, it is useful to make a note of your water hardness level.

- Enter your water hardness level here:
  _____ gr/gal or _____ ppm

C. Salt Indicator (see illustration)

Reactivation takes place automatically during a program. The "Recharging" indicator (#1 in illustration) illuminates.

When the salt reservoir is empty, the "Recharge" indicator (#2 in illustration) illuminates to remind you to fill the reservoir.



13. Prime the pumps

Note: Only use detergent and neutralizer recommended by Miele.
Take care when handling liquid agents and additives as they may contain irritant or corrosive ingredients. Follow the manufacturer's safety instructions and relevant Health and Safety procedures carefully. Wear protective gloves and goggles.

A. Priming the neutralizer dispensing system

- Turn the program selector to the "Stop" ⊽ position.
- Turn off the machine.
- Press and hold the "Display" min °C and "Start" ◇ buttons at the same time. Simultaneously turn the machine on with the "On/Off" button.

The current program status "P…" will appear in the display and the "Fill/Drain" indicator will illuminate.

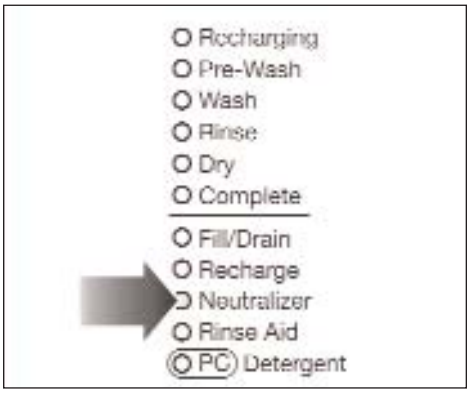
- Press the "Drying" button twice, "E02" (programming level) will appear in the display.
- Turn the program selector to the 5 o'clock position. "do3" appears in the display.
- Press the "Display" min °C button. The dispensing system will be primed automatically. "do3" will appear in the display when priming is finished.

Note: Run the "Rinse" program to dilute and drain away any agents that may remain in the wash cabinet every time the dispensing system has been primed.

B. Refilling the neutralizing agent

When the "Neutralizer" indicator illuminates (seen right)

- Replace the current neutralizer container with a full one.
- The indicator light should go out.
- If the container has been allowed to run dry, the light will not go out until the priming process is performed.



C. Setting & priming the optional DOS G60/1 detergent dispensing system

As a separate option, the G 7881 can be fitted with the DOS G60/1 liquid detergent dispenser. The DOS unit is supplied with its own installation instruction manual. Follow the instructions for connecting the dispensing option. Once connected to the G 7881 secure the detergent supply tube in the detergent bottle.

Setting the detergent dosage

- Turn the program selector to the "Stop" ⊽ position.
- Turn off the machine with the "On/Off" button.
- Press and hold the "Display" min °C and "Start" ◇ buttons at the same time. Simultaneously turn the machine on with the "On/Off" button.
- The current program status "P…" will appear in the display and the "Fill/Drain: indicator will illuminate.
- Press the "Drying" button twice. "E02" (programming level 2) will appear in the display.
- Turn the program selector to "Wash" (2 o'clock position).
- Press the "Display" min °C button as many times as necessary to set the dosage amount .40 (50 ml).

13. Prime the pumps (continued)

C. Setting & priming the optional DOS G60/1 detergent dispensing system (continued)

- Turn the program selector to the 1 o'clock position. "do1" appears in the display.
- Press the "Display" min °C button. The dispensing system will be primed automatically. "do1" will appear in the display when the priming is finished. Ensure that priming has occurred by visually inspecting machine chamber for dispensed detergent. If priming has not occurred, repeat priming step.
- Press the "Start" ◇ button. "SP" will appear in the display.
- Press the "Start" ◇ button again. The setting will now be stored in memory. The display will go out.
- After priming, run the "Rinse" program to remove detergent residues from the wash chamber.

Note: If detergent is allowed to become empty, reference G 7881 Operating Instructions for priming the system.

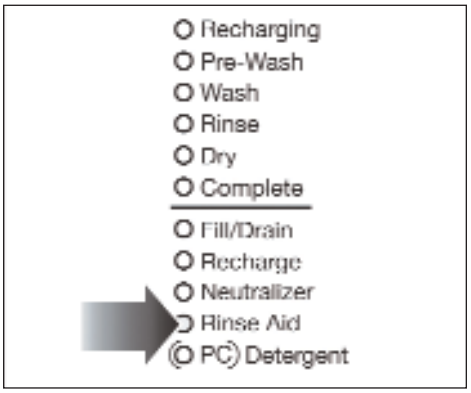
14. Add the rinse aid

Rinse aid is necessary to ensure water does not cling to and leave marks on items during the drying phase. It also enables items to dry faster after they have been washed. Rinse aid is poured into the storage reservoir and a pre-set amount is dispensed automatically. The rinse aid reservoir holds approximately 180 ml.

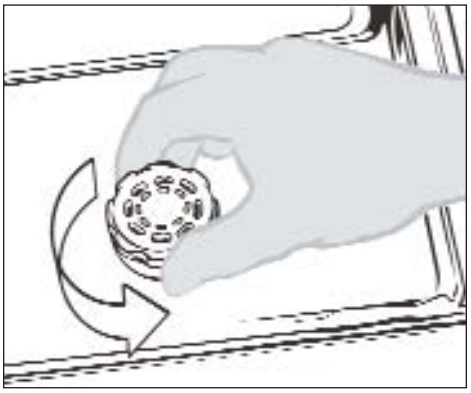
Inadvertently filling the rinse aid reservoir with detergent (including liquid detergent) will damage the reservoir. To avoid damage and ensure proper results only use Miele approved rinse aid.

A. Adding rinse aid

- The reservoir must be filled with rinse aid when the"Rinse Aid" indicator illuminates (as seen in illustration).
  There is also a level indicator for the rinse aid reservoir on the inside of the door.
- Open the door fully.



- Unscrew the cap (see illustration).

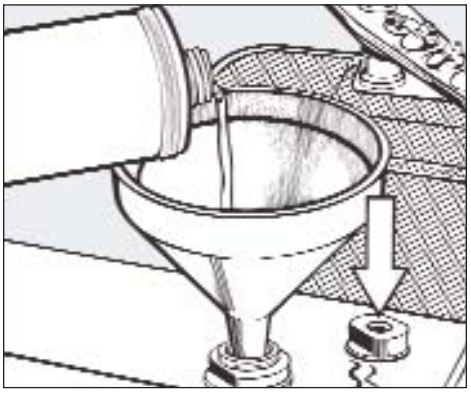


14. Add the rinse aid (continued)

A. **Adding rinse aid**

Pour rinse aid into the storage container until the level indicator is dark (see arrow in the illustration). Use a funnel if necessary.

- Screw the cap back on and wipe up any spilled rinse aid. This prevents over-foaming from occurring during the next program.
- Wait until the "Rinse aid" indicator on the control panel illuminates before adding more rinse agent.



B. **Setting the dosage**

- The dosage adjuster in the opening as settings from 1 to 6 (1-6ml) It is factory-set to 3 (3ml).
- Use a higher setting if spots are left after drying.
- If surfaces become cloudy and/or streaky, use a lower setting.

15. Load baskets & inserts into the machine

The G 7881 normally requires a top and bottom basket. Various inserts and special baskets are also available for a wide variety of instruments.

A. **Preparation**

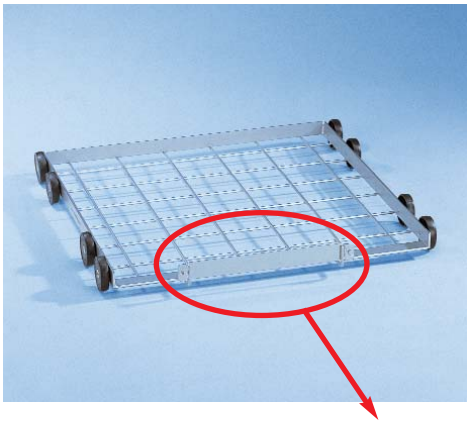
- Ensure that no acid or solvent residue, especially hydrochloric acid or chlorides, gets into the wash cabinet.

B. **Load the bottom basket**

- Insert lower basket with handle, circled in photo, facing out of the machine.
- Add all applicable inserts.

C. **Load the top basket into the wash chamber**

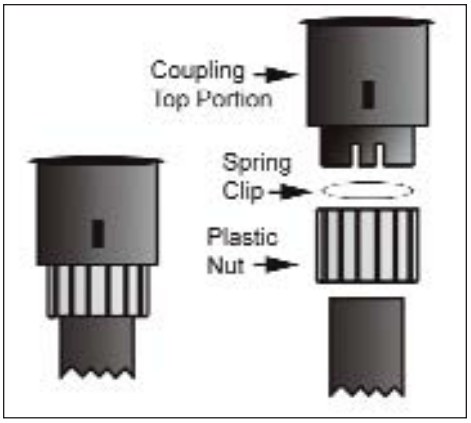
- Add all applicable inserts.



15. Load baskets & inserts into the machine (continued)

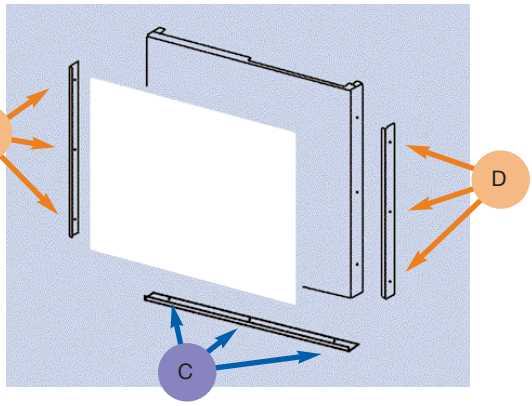
D. **Adjust the top basket coupling**

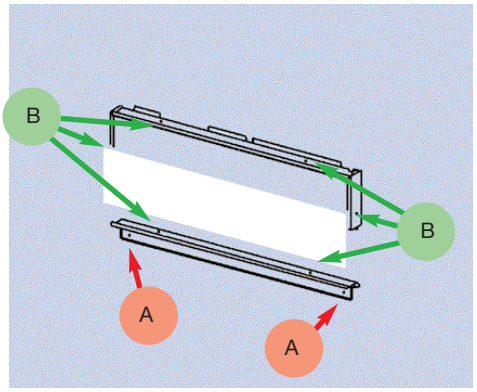
- Fully insert top basket, ensuring water coupling connects with water inlet in the top of the chamber. Not inserted into machine, this water coupling must be 4-5 mm higher than the water connection inlet. If it is not, loosen the plastic nut, push the adapter 4-5 mm higher than the water connection inlet, and tighten the plastic nut.



16. Décor panel mounting instructions (optional)

1. Remove the Lower Panel from the G 7881 via the 2 mounting screws (A).
2. Remove the Lower Panel Décor Frame mounting piece via 6 phillips head screws (B).
3. Slide out the Lower White Décor Panel and replace it with the laminate sheet.
4. Replace the Lower Panel Décor Frame mounting piece via the 6 phillips head screws (B). Set Lower Panel aside.
5. Remove the bottom piece of the Upper Panel Décor Frame via the 3 phillips head screws (C).
6. Open the machine door so side screws are accessible (D).
7. Remove both sides of the Upper Panel Décor Frame via the 3 phillips head screws on each side (D).
8. Slide out the Upper White Décor Panel and replace it with the laminate sheet.
9. Replace the sides of the Upper Panel Décor Frame via the 3 phillips head screws on each side (D).
10. Close the machine door so bottom screw holes are accessible (C).
11. Replace the bottom piece of the Upper Panel Décor Frame via the 3 phillips head screws (C).
12. Replace the Lower Panel on the G 7881 via the two mounting screws (A).





17. Run the program cycle. Program will take ~50 minutes. If successful, the G 7881 is now ready to operate

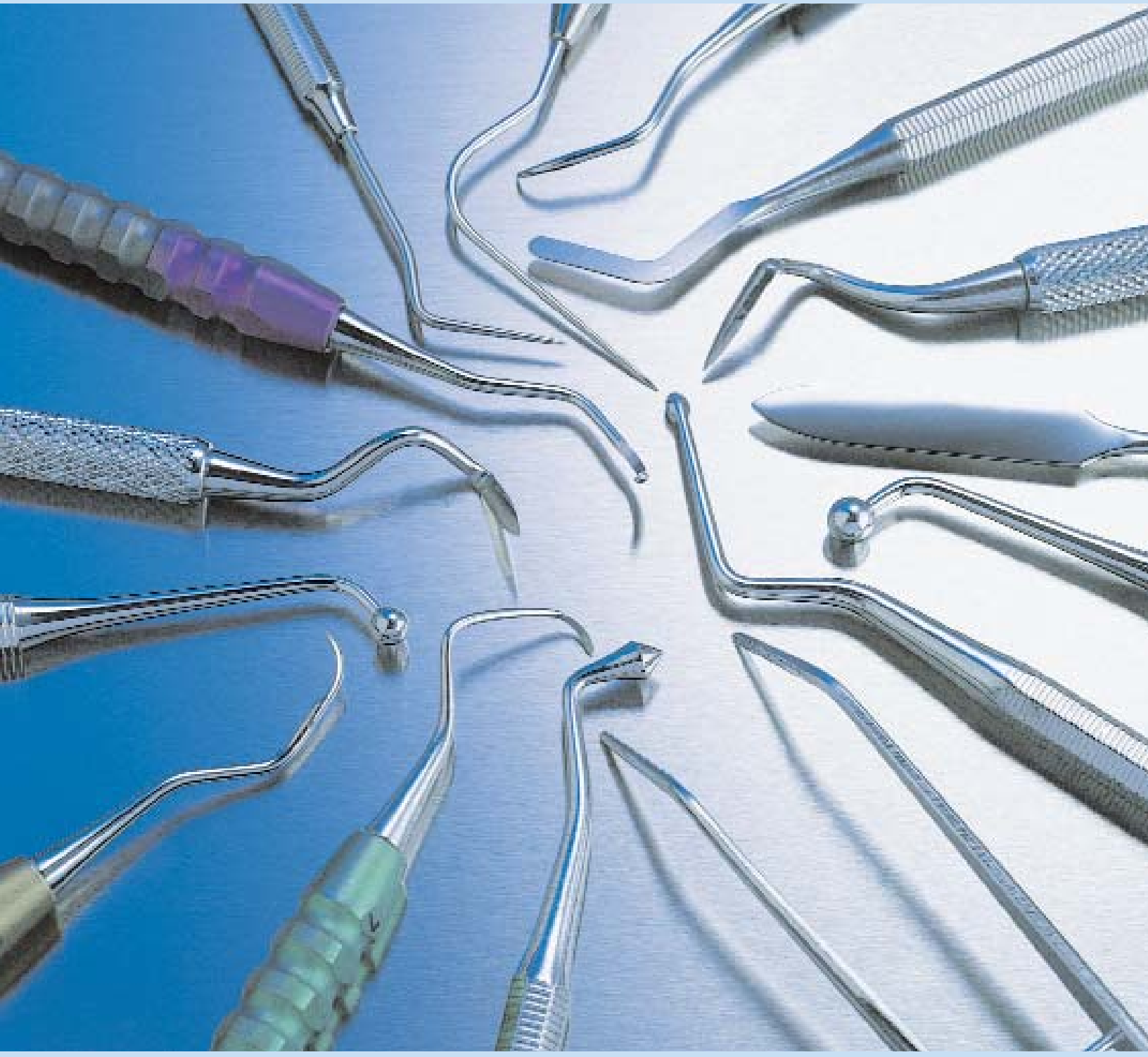
Technical Data

Control Unit	
Control system supplied with five standard programs:	
	Disinfection Vario 93ºC/200ºF
	Disinfection 93ºC/200ºF
	Wash
	Rinse
	Drain
Cleaning Mechanism	
Rotary:	Three multi-jet spray arms
Direct Injection:	Using optional O 177/1 Upper Basket
Drying	
Flash heat drying using standard sump heating element	
Water Softener	
Built-in, with adjustable water hardness	
Automatic reactivation	
Detergent Dispensing	
Machine is equipped with a standard powder door cup	
An optional automatic dispensing module is available for dispensing of liquid detergents	
Main Circulation Pump	
Circulation:	106 gal/min (400 l/min)
Construction:	ABS plastic impeller and housing
Cabinet and Chamber	
Materials and Construction:	
Exterior:	White front panels standard, with optional stainless steel panel or custom panels available
Interior:	Type 304 SS sides, back, and top
	Type 316 SS bottom and door
Plumbing Connections	
One or two water connections as follows:	
Tap	a. Cold water for wash cycles. 5’5” connection hose with 3/4” hose thread unions
	Minimum flow rate of 2.5 gpm/10-147 psi (recommended 25-60 psi)
DI Source (use optional)	b. 5’6” connection hose with 3/4” hose thread unions
	Minimum flow rate of 2.5 gpm/10-147 psi (recommended 25-60 psi)
Drain Connections	
Connection	One 7/8” ID flexible drain hose, 4’7” long
	Maximum drain height, 39.4”
	Maximum drain length, 13’
Electrical Requirements	
Single Phase 208 V, 60 Hz, 2 x 30 Amps	
Three Phase 208 V, 60 Hz, 3 x 20 Amps (Available as an optional conversion)	
	Unit is equipped with a 5’11”, 10 AWG, 3 wire, unterminated power cord
	Units are CSA approved (certificate 1319665)
Dimensions	
Interior:	18.5”H x 20.5”W x 20.5”D
Exterior:	33.46”H x 23.54”W x 24.0”D (Height is 32.28” without lid)
Noise Level	
< 60 dBa	
Customizable Décor Panels	
Main Panel:	442 mm H x 586 mm W, 1.2 mm thick
Toe Kick Service Panel:	117 mm H x 586 mm W, 1.2 mm thick

Stainless Steel and select Laminate Décor Panels available through Miele. Custom panels available with a 6-8 week delivery time.

Miele
PROFESSIONAL

Miele Professional
9 Independence Way
Princeton, NJ 08540
✆ 800-991-9380
🖷 609-419-4241
dentaldisinfector.com



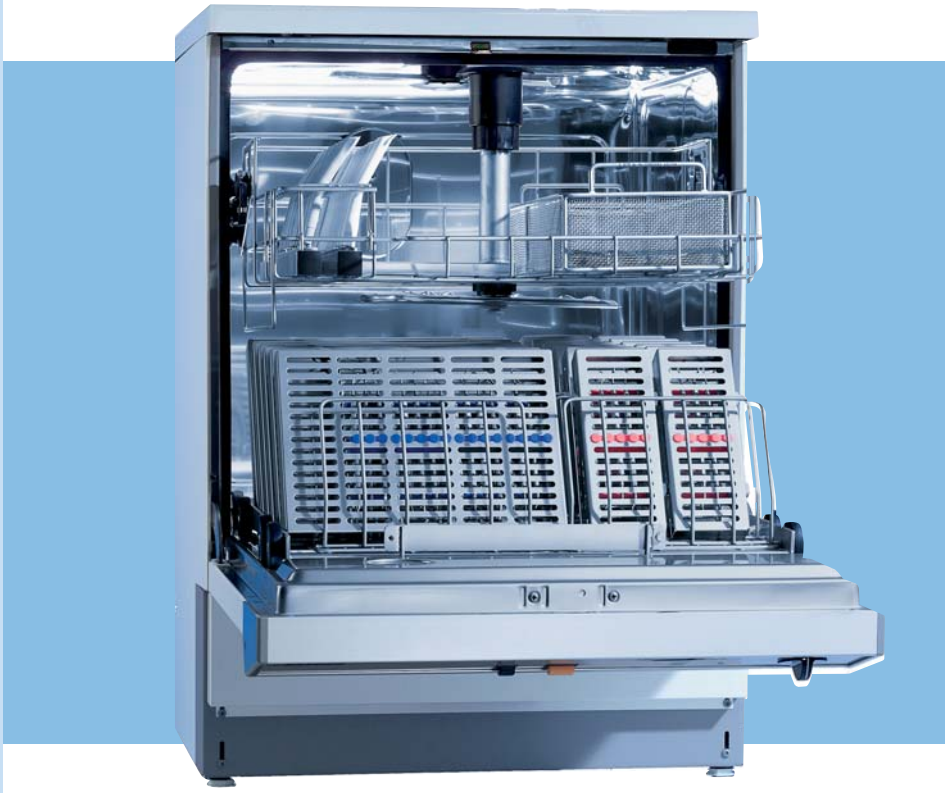
©2006 Miele, Inc.

B999617 11/06

DENTAL WASHER DISINFECTOR GUIDELINES

Instrument Handling Recommendations

1. After use, all dirty instruments are placed back in cassettes or trays. Wipe off all gross debris and cements/ composites directly after treatment.
2. Instruments should not be pre-soaked, rinsed or hand-scrubbed.
3. Cassettes and/or loose instruments are placed into the Miele Dental Washer Disinfector.
4. The Miele Dental Washer Disinfector serves as the “dirty storage area” and will clean and disinfect instruments that have been sitting for up to 6 hours. Do not allow dirty instruments to sit overnight.
5. Recommended cycle: Disinfection VARIO.
6. Choose optional 10 minute drying cycle if desired, and press the Start button.
7. Open the door immediately after the cycle ends to release hot air & steam and let instruments cool.
8. The instruments/cassettes are safe to handle and ready for wrapping and sterilization.
9. The sterile instruments should be stored in dust-sealed cabinets before their next use.
10. **NOTE:** Do not leave machine running when leaving for the day unless cycle is completed and door is cracked open.



What Instruments are Suitable to be Processed in the Dental Washer Disinfector?

Recommended Instruments

All instruments, accessories and other items that have heat resistance to a temperature of up to 95°C/203°F and corrosion resistance in the presence of heat and alkalinity

Plastic instruments that can withstand high temperatures

General high-quality stainless steel instruments

Hollow instruments (aspiration tips, etc.)

Cassettes or trays (stainless steel or resin)

Hinged instruments (scissors, forceps, etc.) Place into machine with the hinge open at 90°

Non-Recommended Instruments

Instruments made from Aluminum, Chrome, Chrome Plated, Nickel, Carbon or Carbide Steel

Plastic instruments that cannot withstand high temperatures

Mirrors

Handpieces

Fiber-optics

Burrs

Drill-bits

Grinders

Suction/syringe tips

Tip: Ask the instrument manufacturer for their advice on the suitability for processing in this system.

Miele PROFESSIONAL

CLEANING AGENTS

Name	What It Does	Directions for Use & Refilling	Tips
neodisherTM MA	Alkaline detergent in powder form Facilitates cleaning process	Detergent must be manually added to machine before every wash cycle. Pour about 3/4 scoop of powder into the dispenser on the door before each cycle. The door of the dispenser should not be blocked by trays or other devices.	Too much as well as too little detergent may have adverse cleaning effects.
neodisherTM FA	Alkaline detergent in liquid form Facilitates cleaning process Note: Requires optional automated liquid dispensing unit	Detergent is automatically dispensed when used in conjunction with optional liquid dispensing unit. Refill when indicator light comes on. Indicator light comes on before detergent container is completely empty.	If detergent container becomes completely empty and air fills the pick-up tubes, it will be necessary to prime the pumps.
neodisherTM N	Neutralizing agent Restores pH balance to prevent instrument corrosion and prolongs machine life	Neutralizing agent will be automatically dispensed at proper time during wash cycle. Refill when indicator light comes on. Indicator light comes on before neutralizer container is completely empty.	If neutralizing agent container becomes completely empty and air fills the pick-up tubes, it will be necessary to prime the pumps.
Mielclear	Rinse Aid Protects instruments against corrosion Breaks down surface tension for faster drying results	Mielclear will be automatically dispensed at proper time during wash cycle. Unscrew the cap in the door to refill when level indicator turns light. Pour Mielclear into storage container in the door until level indicator darkens.	Make sure that any spillage is wiped off the door after refilling or run the Rinse cycle immediately after refilling.
Somat Salt	Reactivation Salt Activates resin used to soften water; prevents instrument corrosion	Set machine according to local water hardness. When Recharge indicator light turns on, refill with Reactivation Salt. See Operating Instructions for further instructions. Run the Rinse Cycle immediately after refilling water softener to be sure all salt is dissolved.	Consumption of salt is dependent upon local water hardness.

TROUBLESHOOTING GUIDE

Problem	Cause	Solution
Spotting (white residue)	Not using water softener Water softener timer not set properly Not reactivating water softener properly Failure to remove gross debris prior to processing	Determine the water hardness from local water authority. Set the water softener to appropriate setting using the Operating Instructions handbook. Replenish reactivation salt as soon as the light comes on according to the instructions in the Operating Instructions handbook.
Rust (textured brown deposits on instruments)	Corrosion from carbon steel instruments “Fly corrosion” Corrosion spreads from carbon instruments to stainless steel instruments Chlorides in tap water	Do not process carbon steel instruments in the Miele dental washer disinfector. Separate stainless & carbon instruments throughout the cleaning and sterilization process. Treat instruments with neodisher™ IR. Have water tested for chlorides. It may be necessary to get an external water purification system if chloride level exceeds 50 ppm.
Chloride-Induced Pitting (points of corrosion, with a small hole in the middle)	Chemical attack on instruments from chlorides or other halide ions Source for chlorides is often tap-water or use of improper cleaning agents	Have water tested for chlorides. It may be necessary to get an external water purification system if chloride level exceeds 50 ppm. Use only Miele approved cleaning solutions. Remove corrosion with neodisher™ IR or it may be necessary to replace instruments.
Discoloration (yellowish or brownish tint on instruments)	Silicates in the water	Treat instruments and the Miele dental washer disinfector wash chamber with neodisher™ IS.
Unsatisfactory cleaning results or white residues	Not using proper procedure: Dirty instruments stored in machine longer than 6 hours Incorrect detergent dosage Overloaded machine Spray arm coupling not engaged Detergent, neutralizer or rinse aid not being dispensed Failure to remove gross debris prior to processing	Do not allow dirty instruments to sit for more than 6 hours. Check the dosage of the detergent and adjust if necessary. Too little as well as too much detergent may have adverse cleaning effects. Place instruments into machine allowing water and detergent to touch every surface. Do not overload. Make sure the spray arm can easily rotate and is not blocked by any devices. There should be a tight fit between the coupling and the water inlet connector at the top of the chamber. Follow directions in the Operating Instructions handbook. Check dispensing, be sure rinse aid dispenser is filled Remove gross debris

QUESTIONS? Call 1-800-991-9380 or email: dental@mieleusa.com

©2006 Miele, Inc.

B999649 09/06